

IN THE CLAIMS:

1. (Currently amended) A toy vehicle having an overall vehicle mass, the toy vehicle comprising:

a body having opposing sides, a front and a rear;

a rear pair of gyroscopic action wheels aligned with each other on a rotation axle and being operatively connected to the rear of said body;

at least one front gyroscopic action wheel having a rotation axle operatively connected to the front of said body; and

means for selectively driving said gyroscopic action wheels at speeds to create a gyro effect at each of said wheels, said gyro effect generating centrifugal forces at each wheel, wherein the centrifugal forces are transformed in torque reactions on the entire toy when at least one of said gyroscopic action wheels is instantaneously reversed through said driving means, and wherein said rear pair of gyroscopic action wheels and said at least one front gyroscopic action wheel have a combined wheel mass and wherein the combined wheel mass is at least 40% of the overall vehicle mass.

2. (Original) The toy vehicle according to claim 1, wherein said driving means comprises:

a first motor and gearing for driving said rear pair of wheels;

a second motor and gearing for driving said at least one front wheel;

radio control electronic circuitry and power supply for receiving remote wireless control commands from a user, said first and second motors being independently controlled by the user.

3. (Previously amended) The toy vehicle according to claim 1, wherein said at least one front wheel further comprises a pair of front wheels, and wherein said driving means comprises:

a first reversible motor and gearing for driving a first pair of side wheels defined by one of said rear pair of wheels and one of said front pair disposed on one side of said body;

a second reversible motor and gearing for driving a second pair of side wheels defined by the other of said rear pair of wheels and the other of said front pair of wheels disposed on the other side of said body; and

radio control electronic circuitry and power supply for receiving remote wireless control commands from a user, said first and second motors being independently controlled by the user.

4. (Currently amended) The toy vehicle according to claim 3, further comprising:

an inside track distance defined as the distance between ~~said~~ opposing pairs of wheels; and

a wheelbase defined by the distance between the rotation axle of each of the two wheels of each respective side pairs, wherein said inside track and said wheelbase are substantially equal.

5. (Original) The toy vehicle according to claim 3, wherein said driving means further comprises:

a first set of gears operatively connected to said first motor and transmitting rotational motion of said motor to said first side pair of wheels equally; and

a second set of gears operatively connected to said second motor for transmitting rotational motion of said second motor to said second side pair of wheels equally.

6. (Original) The toy vehicle according to claim 5, wherein each of said wheels have a diameter, and said diameters are equal to each other.

7. (Original) The toy vehicle according to claim 5, wherein each of the wheels have a diameter, said front wheels having a diameter smaller than the diameter of said rear wheels.

8. (Original) The toy vehicle according to claim 1, wherein each of said wheels have an outer circumferential surface having varying coefficients of friction based on the point of contact with a running surface on which the toy is being operated.

9. (Currently amended) A radio controlled toy vehicle having an overall vehicle mass, the toy vehicle comprising:

a body having opposing sides, a front and a rear;

a rear pair of gyroscopic action wheels aligned with each other on a rotation axle and being operatively connected to the rear of said body;

a front pair of gyroscopic action wheels aligned with each other on a rotation axle being operatively connected to the front of said body; and

a first reversible motor and gearing for driving a first pair of side wheels defined by one of said rear pair of wheels and one of said front pair disposed on one side of said body;

a second reversible motor and gearing for driving a second pair of side wheels defined by the other of said rear pair of wheels and the other of said front pair of wheels disposed on the other side of said body; and

radio control electronic circuitry and power supply for receiving remote wireless control commands from a user, said first and second motors being independently controlled by a user;

wherein said first and second motors drive said gyroscopic action wheels at speeds to create a gyro effect at each of said wheels, said gyro effect generating centrifugal forces at each wheel, wherein the centrifugal forces are transformed in torque reactions on the entire toy when at least one of said gyroscopic action wheels is instantaneously reversed through said driving means, and wherein said rear pair and said front pair of gyroscopic action wheels have a combined wheel mass and wherein the combined wheel mass is at least 40% of the overall vehicle mass.

10. (Original) The toy vehicle according to claim 9, wherein driving means further comprises:

a first set of gears operatively connected to said first motor and transmitting rotational motion of said motor to said first side pair of wheels equally; and

a second set of gears operatively connected to said second motor for transmitting rotational motion of said second motor to said second side pair of wheels equally.

11. (Original) The toy vehicle according to claim 10, wherein each of said wheels have a diameter, and said diameters are equal to each other.

12. (Original) The toy vehicle according to claim 10, wherein each of the wheels have a diameter, said front wheels having a diameter smaller than the diameter of said rear wheels, said first and second gearing being adjusted to compensate for the smaller diameter of said front wheels and enable substantially equal inch/second velocities of said front and rear wheels.

13. (Original) The toy vehicle according to claim 10, wherein each of said wheels have an outer circumferential surface having varying coefficients of friction based on the point of contact with a running surface on which the toy is being operated.

14-15 (Cancelled)